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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/241,450	02/02/1999	JOHN O. RUID	1-8380	8758
8933	7590	07/23/2004	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT ONE LIBERTY PLACE PHILADELPHIA, PA 19103-7396			RUDDOCK, ULA CORINNA	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/241,450

Applicant(s)

RUID ET AL.

Examiner

Ula C Ruddock

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-10 and 29-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-10 and 29-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's response filed May 14, 2004, has been carefully considered. In view of Applicant's remarks, the Examiner withdraws all rejections set forth in the previous Office Action dated February 17, 2004. However, after an updated search, the invention as currently claimed is found to be unpatentable for reasons herein below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 37 appears to be missing a dimension in its description of the density of the body layer. Applicant is claiming a density of "1 per foot³." There must be a dimension in the first part of the description, e.g. 1 *pound* per foot³ or 1 *ounce* per foot³. For the purposes of examination, the Examiner will be interpreting the claim to read on 1 pound per foot³ as seen in the present specification on page 7. Correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6, 9, 30-32, and 34-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Horner, Jr. et al. (US 2003/0032351). Horner, Jr. et al. disclose a facer suitable for use in insulation boards (abstract). The facer comprises fibrous mats (i.e. nonwoven) made of glass fibers [0017 and 0018]. The fibrous mat is coated with an acrylic based resin [0021] having a thickness of from about 1-100 mils [0022]. Preferably, the coating mixture does not penetrate through the mat [0024]. With regard to Applicant's limitation of a "roughly textured face," it is the Examiner's position that resin bonded glass fibers inherently have a rough surface. Therefore, because the fibrous mat of Horner, Jr. et al. contains a resin binder [0018], it would have a rough surface. The resulting facer product is flexible and possesses low permeability to liquid chemicals used for insulation cores as well as superior dimensional stability and high tensile strength after curing [0023]. A second fibrous surface is positioned above the first fibrous mat [0034].

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 29 and 38 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Horner, Jr. et al. (US 2003/0032351), as shown above.

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Horner, Jr. et al. disclose the claimed invention except for the teaching of Applicant's entire process of making the insulation. It is not seen how Applicant's method of making the insulation composite significantly affects the chemistry or structure of the insulation composite itself. It is the examiner's position that the insulation material of Horner, Jr. et al. is identical to or only slightly different than the claimed insulation composite prepared by the method of the claims, because both insulation material comprises a first and second nonwoven fiberglass layer and a cured acrylic coating having a thickness of 1 millimeter. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). The Horner, Jr. et al. reference either anticipates or strongly suggests the claimed subject matter. In the event any difference can be shown for the insulation material of the product-by process of claims 29 and 38, as opposed to the product taught by the Horner, Jr. et al. reference, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results.

Claim Rejections - 35 USC § 103

8. Claims 7, 8, 10, 33, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horner, Jr. et al. (US 2003/0032351), as shown above. Horner, Jr. et al. disclose the claimed

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invention except for the teaching that the thickness dimension of the cover layer has a variation of at most 1 mm, that the cover layer extends into the body layer to a distance from the roughly textured face at most about 95% of the thickness dimension, that the second web is a nonwoven having a thickness in the range of about 0.062-0.25 inch, and that the body layer has a density of about 1 pound per foot³.

It should be noted that optimizing the coating thickness variation, the percentage of coating in the nonwoven mat, the thickness of the nonwoven web, and the density of the body layer are result effective variables. For example, the smaller the coating thickness variation, greatly enhances the aesthetic value of the insulation board and decreases the chance of delamination. Furthermore, the greater the thickness of the nonwoven directly affects the strength of the entire composite. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a cover layer having a thickness dimension variation of at most 1 mm, a cover layer that extends into the body layer to a distance from the roughly textured face at most about 95% of the thickness dimension, a nonwoven web having a thickness in the range of about 0.062-0.25 inch, and a body layer having a density of about 1 pound per foot³, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized these claimed measurements motivated by the desire to obtain an insulating composite that has enhanced aesthetics, decreased delamination, and increased strength and durability.

With regard to Applicant's disclosure of a "nonwoven of wet laid glass fiber," it has been held that the method of forming a product is not germane to the issue of patentability of the product itself. Therefore, this limitation has not been given any patentable weight.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Green et al. (US 5,397,631) disclose insulating systems comprising nonwoven glass fibers having a thickness of 20-33 mils that is coated with an acrylic resin coating having a thickness of .1 to .76 mm, but fails to disclose a second fibrous web. Miller et al. (US 6,207,245) disclose a fiberglass insulation blanket whose surface is immersed in acrylic adhesive, but fails to disclose the thickness of the coating or the use of a second fibrous web.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR *UCR*

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